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(54) **Computer-implemented method for selectively displaying content to a user of a social network, computer system and computer readable medium thereof**

(57) A computer-implemented method for selectively displaying a content to a user of a social network, including maintaining in a computer system for each user of the social network a profile including data on individual preferences and/or interests of the user and the signifi-

cance of each preference and/or interest for the user; providing input data including content; receiving a request of the user for displaying content; and selectively displaying filtered content to the user in response to the request, in which the filtered content is displayed in accordance with the profile of the user.

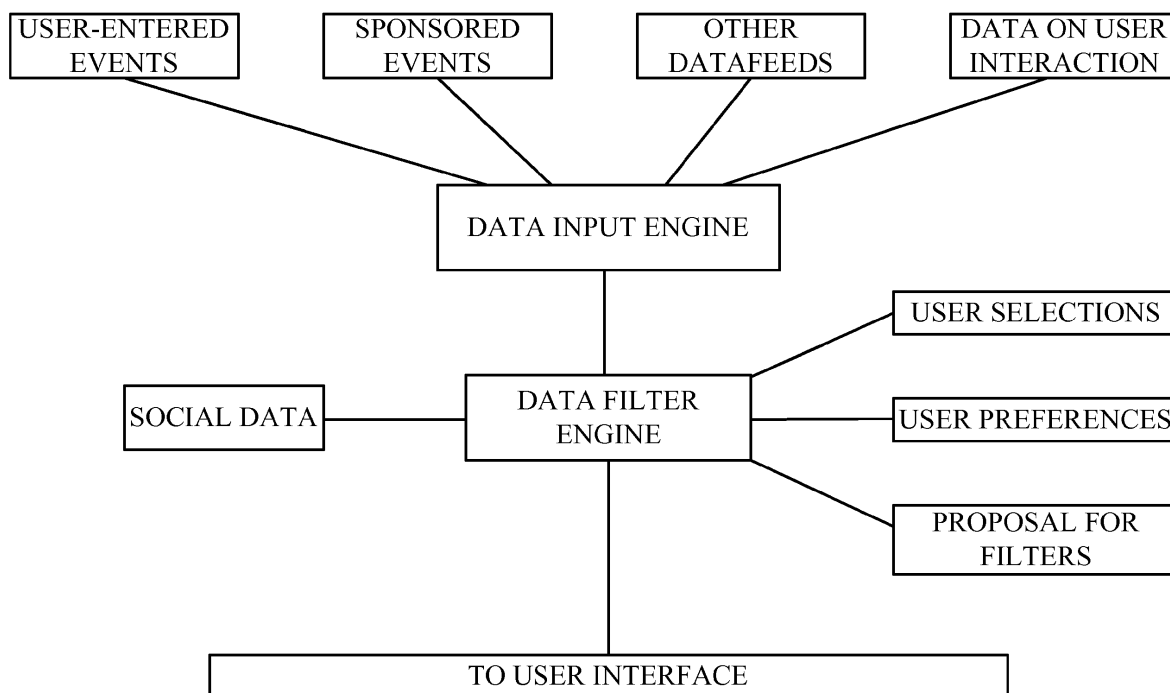


FIG. 2

Description

Related Applications

[0001] The present application is related to co-pending U.S. provisional application s/n 61/533.277 "A computer-implemented method for displaying an individual timeline of a user of a social network, computer system and computer readable medium thereof" filed on September 12, 2011 and to U.S. provisional application s/n 61/533.279 "A computer-implemented method for posting messages about future events to users of a social network, computer system and computer readable medium thereof" filed on September 12, 2011, both of the applicant, , the whole content of which is hereby incorporated by reference.

FIELD OF INVENTION

[0002] The present invention relates in general to social networks run in a computer environment and related in particular to methods and systems for selectively displaying content to a registered user (member) of a social network in accordance with selectable, pre-selectable or adjustable settings of the user such as preferences and/or interests, wherein the settings are preferably stored as part of the profile of the user on a central service of the social network. The method and system according to the present application enhances the efficiency to provide relevant content to user of a social network or online community.

BACKGROUND OF INVENTION

[0003] With the increasing popularity of social networking traditional forms of joining, sharing interests and hobbies and making appointments, e.g. by joining social clubs, attending social events, meeting friends through other friends, and so forth are replaced by social activities via the Internet, in particular by some sort of social forum for networking and meeting new people. It can even be said that for many people, the Internet nowadays represents the principal way in which the people meet new friends and remain in touch with existing friends, because the Internet enables establishing and maintaining interactions between vast numbers of individuals.

[0004] For this purpose various social networking websites have been developed in recent years. Social networking websites can provide organizational tools and forums for allowing these individuals to interact with one another via the social networking website. Many users prefer to limit communications to specific groups of other users or friends sharing the same or similar interests and activities.

[0005] Social network websites also display content to the users in a manner similar to standard portals in the Internet, the content covering potential interests of the users of the social network. Typical websites display their

information (content) based on terms the user does not define himself, such as the latest news (based on time), advertisements (based on the interest of advertising companies) or content that is placed on that page by the decision of the hosts.

[0006] To run a successful community, the site needs to present all available content in a format that satisfies every user, e.g. the content presented is suited for the user and is very relevant to what the user is looking for in the context the user is in. It can even be said that the success of a social network will depend on the relevance of the content displayed to the respective user. Therefore, there exists a need to selectively display content to the respective user of a social network website in accordance with the preferences and/or interests of the respective user.

[0007] According to the prior art methods for analyzing and categorizing data streams (content) are known.

[0008] US 2010/0088322 A1 discloses a method for identifying so-called hot topics. For this purpose a news stream is analyzed for keywords and the frequency of citation of the keywords is determined. The method also utilizes a graphical representation for visualizing this frequency of citation of the keywords. If the frequency exceeds a predetermined threshold value, a keyword becomes a hot topic that is e.g. displayed in an online community and thus communicated to a plurality of users potentially interested in this topic.

[0009] US 2009/0171869 A1 discloses a related method, which tries to predict hot terms in the future. For this purpose a categorization model is used.

[0010] US 2007/0016609 A1 relates to a method for analyzing news streams utilizing tools that can analyze content to determine its traits, classify the content based on its traits, and present the content in a user interface tailored to the classification. The tools can also organize content items into groups based on a common trait and enable a user to select content items through their group. Responsive to the user's selection of a group, the tools can present content, render enclosures, and alter traits of the content items in the group. The content is not tagged with time-information.

[0011] US 2009/0319914 A1 discloses a method for determining a relationship between participants in an on-line community based on various facts. The nature of the relationship is represented in a user interface (UI) by a visual element that shows the extent or depth of the relationship. Facets of the relationship may be used to facilitate interaction between participants (e.g., if two participants both like a particular band, then information relevant to the band may be shown as part of the UI when the participants interact with each other). The nature of the relationship may be determined or characterized based on commonality of activities, commonality of interests, the extent to which the participants have interacted with each other in the past, or other facts.

SUMMARY OF INVENTION

[0012] The present application is directed to an enhanced method and system for selectively displaying content to a user of a social network.

[0013] According to the present invention there is provided a computer-implemented method for selectively displaying content to a user of a social network, comprising: maintaining in a computer system for each user of said social network a profile including data on individual preferences and/or interests of the user and the significance of each preference and/or interest for the user; providing input data including content; receiving a request of said user for displaying content; and selectively displaying filtered content to said user in response to said request, wherein said filtered content is displayed in accordance with the profile of said user.

[0014] According to a preferred embodiment the filtered content is displayed in accordance with a list of keywords and in accordance with the individual preferences and/or interests of said user, wherein the list of keywords is stored as part of the profile of said user on a central server of said social network. According to the present invention the content which is selectively displayed to the user is controlled by means of settings stored in the individual profile of the respective user, such as individual preferences and/or interests of the respective user or information encoding such individual preferences and/or interests.

[0015] According to a further embodiment the step of setting said list of keywords, comprises: displaying a graphical representation of said list of keywords on a graphical user interface (GUI) of an electronic device operated by said user, wherein the graphical representation indicates the significance of said keywords and the connection of said keywords with other keywords included in said list of keywords; modifying the significance and/or connection of said keywords in response to input data of said user, such as navigational input data of user navigational interactions on said graphical user interface, to thereby obtain a modified list of keywords including the keywords and the respective significance and/or connection associated with these keywords; and storing said modified list of keywords as part of the profile of said user on a central server of said social network. Hence, the selective filtering of the content displayed to the user is accomplished by means of a graphical representation of the individual preferences and/or interests of the respective user and by means of modifying this graphical representation by means of a suitable user input. That user input may be obtained by means of a classical data input mask for inputting and/or modifying text information. Preferably, however, the user input is derived from user interaction with the graphical user interface by means of a pointing device, such as a mouse, stylus or finger touch on a touch-sensitive display, said pointing device modifying the position, significance and/or connection of graphical representations of the respective keywords,

e.g. by modifying the size or color or other graphical feature of a graphical representation of the respective keywords, wherein the size or color or other graphical feature of a graphical representation encodes the significance (individual weight) of the respective keywords or moving the graphical representation of a keyword to a different location relative to the locations of the other keywords included in the list of keywords, wherein the distance between keywords encodes the connection strength between the keywords involved.

[0016] According to another preferred embodiment the graphical representation of said list of keywords is displayed as a separate window of said graphical user interface (GUI) upon activation of a menu button of said graphical user interface (GUI). Hence, by opening the dedicated window for setting or adjusting the individual list of keywords, the selective filtering of content displayed to the user can be modified in a simple manner transparent to the user.

[0017] According to another preferred embodiment the filtered content is displayed in a central display area of the graphical user interface (GUI), wherein the menu button is permanently displayed at a periphery of the central display area of said graphical user interface, wherein, if the dedicated menu button is activated, the graphical representation of the list of keywords is displayed in a separate window of the graphical user interface and the user can navigate in this separate window for setting or adjusting the individual list of keywords. Preferably graphical user input and/or gestures are used for the purpose of setting or adjusting the individual list of keywords. According to this embodiment the user can repeatedly change between a window for displaying the graphical representation of the modified list of keywords and the window for displaying the modified filtered content (the main window of the social network website).

BRIEF DESCRIPTION OF DRAWINGS

[0018] Hereinafter the invention will be set forth in an exemplary manner and with reference to the enclosed drawings, from which further features, advantages and technical effects achieved will become apparent. In the drawings:

- Fig. 1 is a schematic block diagram of an exemplary system environment for implementing a social network;
- Fig. 2 is a schematic block diagram summarizing the processes of obtaining input data and filtering the input data in accordance with the personal preferences and/or interests of an individual user of the social network according to Fig. 1;
- Fig. 3 is a schematic block diagram of the social network engine shown in Fig. 2;

- Fig. 4 is a schematic diagram summarizing options presented to a user to set or adjust a list of keywords, such as preferences and/or interests of a user, when interacting with the social network according to Fig. 1;
- Fig. 5 is an exemplary graphical representation of a list of keywords according to the present invention, namely a so-called interest cloud showing the preferences and/or interests of the user as a result of setting or adjusting the personal preferences and/or interests;
- Fig. 6 schematically summarizes the steps of modifying a list of keywords (interest cloud) according to another embodiment of the present invention;
- Fig. 7 schematically summarizes the steps of modifying a list of keywords (interest cloud) according to another embodiment of the present invention;
- Fig. 8 schematically summarizes the steps of modifying a list of keywords (interest cloud) according to another embodiment of the present invention;
- Fig. 9 is an exemplary graphical representation of another embodiment of a list of keywords (interest cloud) according to the present invention;
- Fig. 10 schematically summarizes the steps of a method according to the present invention to selectively filter input data (content) to thereby create modified data that are output to a graphical user interface to be displayed (modified content);
- Fig. 11 schematically shows a mobile electronic device embodied as a smart phone displaying a graphical user interface for performing the method according to the present invention; and
- Fig. 12a and 12b schematically show a display of a smart phone with content displayed in accordance with a first list of keywords (interest cloud) or a second different list of keywords (interest cloud);

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

[0019] FIG. 1 is a schematic block diagram of an exemplary system environment for implementing a social

network according to the present invention. One or more users user 1, user 2, ... user N are in communication with a social network engine via a network. The social network engine operates a social networking website and may include one or more servers or any other device or application capable of providing social networking services via the network. The users can access the services provided by the social network engine via the network.

[0020] The users may use a computing device, such as a laptop or desktop computer, a smart phone, a personal digital assistant (PDA), a set top box, and so forth to access the social network engine. The users 102 can view data about social network members, enter data about themselves and possibly others, join social network groups, view content on a graphical user interface (GUI) and so forth. The users are typically members of a social networking website associated with the social network engine.

[0021] When being connected to the social network, a user, such as the user 1, can identify one or more other members associated with the social network engine as friends, such as user 2. Friends will usually share similar preferences and/or interests and such relationships can be established based on user input, e.g. when a user explicitly appoints another member of the social network as a friend based e.g. on similar preferences or interests as determined based on individual preferences input by the two users. As an alternative such relationships can be established based on user interaction with the social network and as a result of a proposal generated automatically by the social network and sent as a message to two users asking them for confirmation whether the respective other user shall be a friend. Such a proposal can be made by the social network engine based on an automatic search in the preferences and/or interests stored in the social network engine for preferences and/or interests of two users matching with each other suitably well.

[0022] The relationship between users of the social network may be confirmed, based on the input, by the social network engine. Alternatively, the existence of the relationship may be denied, according to some embodiments. Any type of confirmation and/or input may be utilized to alter, deny, and/or establish the relationship between users.

[0023] Fig. 2 is a schematic block diagram summarizing the processes of obtaining input data and filtering the input data in accordance with the personal preferences and/or interests of an individual user of the social network according to Fig. 1. All data are input via a data input engine, which can be a component of the aforementioned social network engine. Various types of data input may be provided: a) the data input may consist of all kinds data about events explicitly input by the user via a user interface, such as a keyboard, graphical user interface (GUI) or interface with other peripheral devices, such as video cameras and the like; b) the data input may also consist of data on sponsored events, which may be in-

formation provided by usually commercial subscribers of the services rendered by the provider of the social network; as an example a developer or publisher of video games may subscribe to the social network or may be a member of the social network and may feed data to the social network about new games and information thereabout; c) the data input may also consist of other data-feeds, such as RSS-Feeds; d) the data input may also consist of data on the interaction of the specific user associated with the timeline to be generated or of all users of the social network or of subgroups of the social network, such as special communities, such data being generated by continuously monitoring and analyzing the user interactions in accordance with search criteria; as an example the provider of the social network may monitor and analyze, e.g. only if the users agree to, all interactions of the users of the social network associated with video games and may prepare these data as input data. For this purpose events, such as when a user decides to watch a trailer of a new video game to be launched soon (e.g. by clicking on an icon or link to the trailer) or decides to play a test version of the new video game, are associated or linked with keywords describing the event (e.g. in the example: the name of the new video game).

[0024] All the above input data may be associated with certain keywords circumscribing the event. Such keywords may briefly categorize the content, purpose, place, length etc. of the event or categorize any action involved in the event. These keywords may be used later for filtering input data (content) and for selectively displaying filtered content on a display of a user.

[0025] Of course, instead of words, the phrase "keyword" as used herein may involve all other kinds of data that may be used to categorize content. As will be explained in the following in more detail, such keywords may be explicitly input by users, may be automatically generated or proposed based on an analysis of the input data or may be proposed by the system and are used only once accepted by a prompted user or being in accordance with the individual preferences and/or interests of a user.

[0026] According to embodiments of the present invention content may also be associated with time tags, which are either automatically generated while monitoring events or which are generated by user interaction. Such time tags enable the sorting of a plurality of events in chronological order, as a prerequisite for displaying selected ones of these events in chronological order.

[0027] The afore-mentioned input data may be stored in a database of the social network engine, usually together with the keywords and the associated time tags.

[0028] As shown in Fig. 2, the system further comprises a data filter engine, which filters the afore-mentioned input data, content or any data derived from these input data or content and transferred from the data input engine. This data filter will usually be located on the side of the provider of the social network as part of the social network engine, but may in principle also be located on

the side of the user. As shown in Fig. 2 the data filter engine is fed with user preferences and/or interests, possibly also with user selections, in accordance with the individual list of keywords (interest cloud), as outlined below. According to the present invention this individual list of keywords encodes specific preferences and/or interests of a user, and might also be fed with proposals for filters, e.g. in the case where a sponsored subscriber of the social network wishes to promote a new video game and thus causes the social network engine to propose all users of the social network or selected ones of these users to add certain preferences and/or interests to the personal profile of the user in order to increase his or her interest on video games in general or on a specific video game in particular.

[0029] Finally, as shown in Fig. 2, the data filter engine may also be fed with so-called social data, as the result of interactions of all users of the social network or of subgroups thereof, such as communities. According to the present invention, such social data can modify the individual list of keywords (interest cloud) of a user. As an example, if the total number or percentage of users showing interest in a new video game, either by explicitly mentioning the name of the new video game when being prompted for such input or implicitly, e.g. as the result of user interactions, e.g. when the users click on a link or icon associated with the new video game, exceeds a certain threshold, the social network engine may propose all users of the social network or selected ones of these users to add certain preferences and/or interests to the personal profile of the user in order to increase his or her interest on the new video game. These proposals may either be accepted by the prompted users by means of a confirmative action, such as clicking on a "YES"-button, or may be accepted automatically, depending on the individual user profile or on the regulations of the provider of the social network.

[0030] As shown in Fig. 2, the content, e.g. the afore-mentioned input data, are filtered by the data filter engine in accordance with the user-specific interest cloud, i.e. a list of preferences and/or interests of the respective user. As an example, if the input data include data relating to video game events and political events, but the individual preferences and/or interests of a user indicate that the particular user is highly interested in video games but not at all in political events, all (or most of the) data relating to the political events are filtered out and only those relating to video games are passed through the data filter engine for display on the display of the user.

[0031] For implementing the above functionality, a social network engine may include the components shown in Fig. 3, although the present invention shall not be delimited to only those components shown in Fig. 3. More specifically, the social network engine may include a communication interface, for handling all communication and exchange of data of the user with the social network engine or with other users of the social network, a social

relationship editor module, which serves in particular for assigning other users of the social network as friends and for monitoring and analyzing the whole data traffic in the social network for identifying candidate new friends for specific users e.g. based on the past user interaction in the social network, a relationship storage module for storing these assigned or candidate relationships, a module for driving a user graphical user interface (GUI), a user history analyzer for monitoring and analyzing the interaction of a specific user or of all users of the social network or of subgroups thereof, such as communities, a content feed generator and a display module configured for providing a display of the user's electronic device with all relevant data for displaying filtered content in the sense of the present application.

[0032] As set forth above, a user may specify individual preferences and/or interests when using and navigating the social network. The term "individual preferences and/or interests" in the sense of the present application shall comprise all suitable criteria and data for reliably identifying individual preferences, interests, dispositions, favorites, long-time user behavior etc. of a specific user when exploring the social network. These individual preferences and/or interests may be input explicitly by the user by means of the web-oriented input mask as shown in Fig. 4 presenting a variety of options to a user to set or adjust his or her individual preferences and/or interests when interacting with the social network. It will be apparent that the input mask shown in Fig. 4 serves only as one example that shall not be construed to delimit the scope of the present application. According to the present application, these individual preferences and/or interests may, however, also be input implicitly as outlined below or automatically, in a clandestine manner, as outline below in more detail.

[0033] More specifically, for selecting and adjusting his or her individual preferences and/or interests in the individual list of keywords (interest cloud), the social network engine may present an input mask as shown in Fig. 4, e.g. when clicking on a menu button "PREFERENCE SETTING". Under this menu item the input mask presents a list of topics TOPIC 1, ..., TOPIC N, which may be pre-selected topics pre-defined by the provider of the social network, which list may, however, also be the result of some kind of background computation, e.g. based on the list of preferred topics of friends with whom the specific user is already connected. As an example, these topics may include "FRIENDS ACTIVITIES", "GAMES", "RESULTS OF ONLINE-GAMING EVENTS", "COMMUNITY NEWS" and the like. As shown in Fig. 4, this list may further include so-called sponsored topics "SPONSORED TOPIC 1", ..., "SPONSORED TOPIC N", which may be topics pre-defined by the provider of the social network, e.g. because of commercial interests of the provider such as advertisement and promoting of goods of customers or affiliated companies. As shown in Fig. 4, the list of topics may also include so-called proposed topics "PROPOSED TOPIC 1", ..., "PROPOSED

TOPIC N", which may be topics identified by the user history analyzer (cf. Fig. 3) as candidate topics of potential interest to a specific user based e.g. on the recent user interactions of the user in the social network, or identified by the social relationship editor module as candidate topics of potential interest to a specific user based e.g. on the friends with whom the specific user is connected to in the social network (relationship significance). Of course, the user history analyzer of the social network engine shown in Fig. 3 may also identify certain topics as candidate topics of potential interest to a specific user based on the overall user behavior of all users of the social network or subgroups thereof such as communities. As an example, if the user history analyzer determines that a significant percentage of the users click on websites about specific topics or if the user history analyzer determines that a significant percentage of all those users that have all defined a specific topic as a topic of preference and/or interest (subgroup) click on websites about this specific topic, then the social network engine may proposed such topics as proposed topics in the input mask shown in Fig. 4. The individual user may then be prompted to confirm whether he or she wishes to add this proposed topic (or interest) to his list of individual preferences and/or interests (community significance).

[0034] As shown in Fig. 4, the user has all options to add and remove such topics (preferences and/or interests) to or from his individual list, at any time. The user may also subscribe to data feeds about certain preferred topics. E.g. the user may wish that a news feed with news about new video games is automatically scanned in accordance with his or her individual preferences and/or interests and that candidate new topics of interests are either proposed in the input mask shown in Fig. 4, in the manner as outlined above, or even automatically added to his or her individual list of preferences and/or interests.

[0035] As shown in Fig. 4, the user may also decide that certain or all preferences and/or interests included in his or her individual list are linked and/or shared with other users of the social network or even with users who are not members of the social network, or that such preferences and/or interests are hidden to and not shared with other users of the network (or as an alternative hidden to and not shared with specific selectable other users or friends with whom the individual user is connected to).

[0036] As shown in Fig. 4, when operating the input mask, the user may also assign or re-adjust so-called weights to selected ones of the above topics. In the sense of the present application the term "weight" refers to any kind of variable or computational parameter suited to indicate the significance of a respective preference and/or interest to the individual user, which variable or parameter may be used attribute a higher significance to such topics (preferences and/or interests) when filtering the input data. As an example, a user may decide that the topic "GAMES" and "NEWS ABOUT NEW GAMES" is of high significance whereas the topic "COMMUNITY NEWS" is of almost zero importance to the user. In such

a case the user may assign e.g. a high significance parameter in accordance with a uniform scale to the favorite topics "GAMES" and "NEWS ABOUT NEW GAMES" and a significance parameter of almost zero to the not preferred topic "COMMUNITY NEWS". All this may be set or adjusted as specifically desired by the individual user, at any time when exploring the social network.

[0037] If applicable, the user may add, remove or change any of the above topics (preferences and/or interests) or assign or re-adjust desired weights to such topics.

[0038] As shown in Fig. 4, the user may also set or adjust the graphical representation for each of the above topics. As an example, the user may decide that all events relating to video games are shown as circles in his individual timeline accompanied by an icon showing a representative image of the video game, such as the trademark or most important character of the game, and that all events relating to his personal activities, such as appointments or conferences in the social network, are shown as squares in his individual timeline accompanied by an icon showing a representative image of the respective activity, e.g. a frog symbol relating to online chats and a mouse symbol for shared online game events.

[0039] As shown in Fig. 4, a list of second order subtopics may be attributed to each of the above topics (SUBTOPIC 1, ..., SUBTOPIC N), and each subtopic may be added or removed, a specific weights may be attributed to each of these subtopics or re-adjusted. Furthermore, additional "nodes" may be added, which shall relate to the generic term for attributing one or more third order subtopic(s) to a specific second order subtopic.

[0040] It is noted that the "Hide / Do not share" button shown in Fig. 4 may be used hiding a certain category of content, in accordance with the set individual preferences and/or interests of a user, on the display of the user, but may also be hidden on the displays of other users of the social network, which are connected with the user and with which the user generally shares the same or similar (matching) interests.

[0041] In this manner, a complex interest cloud as an individual list of keywords representing all preferences and/or interests of an individual user may be built up as explained in more detail in the following.

Interest Cloud

[0042] More specifically, the interest cloud is a defined space of explicit and implicit preferences and/or interests shown e.g. as weighted keywords that reflect the individual preferences and/or interests of a specific user or a specific group of users towards content (news, blogs, media, games, people, activities, sponsored content, ads, files, pages...). The interest cloud itself is updated based both on the behavior of the user - the system may implicitly weight keywords based on frequency of interaction of associated content - and/or by the user directly and explicitly adding or removing keywords and increas-

ing or reducing the weight of such keywords, based on his degree of interest, in the manner as set forth above with reference to Fig. 4. The user can re-weight, edit, modify, delete or perform other changes also on implicit keywords from the system, to further refine his interest cloud. Context keywords are added or layered upon the existing interest cloud to maximize the correct representation of the user's true interests.

[0043] The interest cloud will mainly be used in online networks such as web communities and content portals, but is not limited to these.

[0044] The purpose of the cloud is to give the user(s) an easy-to-understand, user-controlled and manageable representation of his/their interests towards content. As a secondary use, the self-managed interest cloud gives content producers (i.e. bloggers, advertisers, manufacturers, communities) a higher hit-ratio and content will be more accepted by the users if the content is actually in the interest of the recipient.

[0045] The interest cloud provides the server with information about keywords the user is or might be interested in depending on his direct interaction with the keywords, implicit keywords and contextual keywords. In other words, an interest cloud is a combination of user-defined keywords, auto-keywords and context based keywords that help the user to organize his interests.

[0046] Content the user has already marked as "interesting to me" will be part of his personal interest cloud by either becoming a keyword itself or by the system deriving keywords from that content. The system creates these implicit keywords by filtering the user's entered profile data, tracking his interaction with content and noting the data of other users he is connected to as well as users with similar interest cloud(s). This is not an exhaustive list: other methods can also be used to collect and predict implicit interest for the interest cloud.

[0047] In addition, the user (or users) may explicitly define keywords in the interest cloud by weighting their significance to him or her.

[0048] The user's context, if available, also adds keywords with weighting and significance to the interest cloud. This can include examples such as geographic position (for instance, being in a music-shop in France, being in a movie-theater, being in a restaurant).

Content of the interest cloud

[0049] The interest cloud contains keywords that stand for certain content, information or activities and any other possible items (preferences and/or interests). For instance, a keyword can be "politics, news" and link to news about politics in general, another can target a single subcategory of news, such as local politics or "news, politics, home country". Other keywords could be music tracks, video files, pictures, persons, characters, events and more.

[0050] Any keyword can theoretically link to any other keywords, creating links between products, persons,

files, etc. and in any wanted granularity. Thus any keyword is always in the context of its similar keywords. Context and similarity is partly defined by the system and partly defined by the active creation of new contexts by the user. It is up to the user to control their interest cloud (directly or indirectly, explicitly or implicitly). Each personal interest cloud also influences the overall context, i.e. if a lot of users connect to keywords manually together that had not been previously connected by the system, the general context or default connection will be updated too.

Structure of the interest cloud

[0051] Every user can express multiple interest clouds, having a main interest cloud about the high-level content he is interested in, as well as interest-clouds for specific content-types, people, activities and more. Depending on the sub-pages and content-box, the community or network provides a sub-interest cloud that is focused on the specific interests for that sub-page, content-box or category.

[0052] Example: User A is not interested in news in general, thus he doesn't include "news" in his main interest cloud. But when it comes to music, he is very interested in news about his favorite bands. His main interest cloud doesn't contain any news, but his music sub-group is concerned with everything about his favorite bands - including news.

[0053] Likewise, it is possible that the main-interest cloud defines a user's interest in "News" and has sub-interest clouds focused around topics such as music, cars, etc. In this case, the main-interest cloud is given hierarchy over the sub-interest clouds and hence "influences" the overall content that is provided to the user.

[0054] Each keyword in the interest cloud has its own weighting and significance attached to it. This reflects how important the item is to the user. The graphical representation of each keyword in the interest cloud reflects this weighting and significance in a unique manner that may also be adjusted individually in accordance with the needs and preference of the individual user. As an example, the significance of each keyword may be indicated by means of the font size, e.g. a bigger keyword shows a higher degree of importance and a smaller keyword may show a lower degree of importance, but the present invention is, of course, not limited to this kind of display. Other means to display significance could be e.g. by means of color-coding, numbers associated with the keywords and the like.

[0055] The interest cloud(s) of the user enables the server (social network engine) to process the interest cloud in order to provide each user with a higher relevancy of web-content, media, files and people in an ordered, prioritized and organized way.

Implicit keywords of the interest cloud

[0056] The interest cloud of any user may also be created dynamically, based upon the profile information the user added to his or her individual profile and by his online behavior. This automatic creation and changes afterwards reflects the interests of the user expressed in an implicit way.

[0057] The user can also provoke the system to propose implicit keywords based on existing keywords. For example, if the user adds "restaurants" as a keyword to his interest cloud, this triggers the system to suggest related keywords that might also interest him. These could include "fast-food restaurants", "exotic restaurants", "restaurants near my location", "restaurants my friends like", etc. Such proposals may be made based on some kind of expert system that e.g. knows or learns from a user's behavior in the past that it is highly likely that a user might also be interested in certain subtopics (e.g. exotic restaurant) if he or she is interested in a certain main topic (e.g. restaurant).

Real-time context keywords

[0058] Real-time context-specific keywords may also be added dynamically, such as geographic context (being in a city, country, a shop, a restaurant) and other contexts (such as but not limited to being in winter, in week 41...). This lets the system retrieve content organized with the help of the user's interest cloud to ensure that is relevant to the context the user is in.

Explicit interest cloud

[0059] The user can also add, reprioritize, change and delete any explicit and implicit keywords inside his interest cloud, on any level. He or she can also enable or disable, reprioritize, change and delete context-specific keywords, thus changing the interest cloud manually in any way needed to tailor it to his satisfaction and his context. This may be performed by operating the input mask described with reference to Fig. 4, but may also be performed directly in a graphical representation of the individual interest cloud as outlined below.

Hierarchy of the interest cloud

[0060] The complete interest cloud of a user may be organized in layers. There is e.g. one main interest cloud and an open number of special interest clouds. This amount depends on the actual amount of interests the user creates in his profile.

Main interest cloud

[0061] The main interest cloud of every user contains the most important interest keywords (preferences and/or interests) the user has, on the broadest possible

level. Interests of the main cloud apply to all special interest clouds. For example, if the user is interested in music in general, the news interest cloud will include news about music by default, as the system implies that this might be in the interest of the user too.

Special interest cloud

[0062] The special interest cloud contains all interests a user has in a specific part of the cloud, e.g. all interests about games. By default, the special cloud is derived from the main interest cloud, but it can be altered as described above. As the interest cloud is a constantly changing network of interests linked to each other, the size and granularity of the cloud is highly dependent on the user's behavior.

Storage of the interest cloud

[0063] The interest cloud is stored as a network of keywords. The interest cloud is stored in several levels (e.g. main cloud, sub-clouds), is linked to a user or group and is stored as part of their main profile on the server (social network engine), and is therefore available for the user anywhere when accessing his profile. A user's interest cloud will be stored alongside his profile for as long as that profile exists, and can be modified by the user at anytime.

Display of the interest cloud

[0064] For a displaying a graphical representation of the interest cloud in the way the cloud functions in the background, according to the present application the items may be displayed in different groupings and styles (e.g. the size of a respective interest may indicate the significance attributed to the respective interest). Thus the user can quickly identify his major interests and how the other items are connected to each other.

[0065] Examples for the graphical representation of such an interest cloud and how these graphical representations are modified, will be explained in the following referring to Fig. 5 to 10. It is noted that the following shall not be construed as delimiting the scope of the present invention.

[0066] Implicit, system-created interest keywords within the cloud have a distinguishable look compared to the explicit keywords. This differentiation includes but is not limited to color-coding, different font-size or the annotation of the keyword with symbols, e.g. @ musicgroup-name.

[0067] Context-created interest keywords within the interest cloud have a distinguishable look compared to the explicit and implicit keywords. This differentiation includes but is not limited to, color-coding, different font-size or the annotation of the keyword with symbols, e.g. c_paris, c_restaurant.

[0068] In Fig. 5, keywords 502a, ..., 502e in black let-

ters indicate explicit keywords, i.e. keywords (preferences and/or interests) explicitly input by the user, e.g. by using the input mask of Fig. 4. Keywords 504a, ..., 504e enclosed by a dashed line in Fig. 5 indicate implicit keywords. In the example the location of the user while exploring the social network is detected by means of the user history analyzer (cf. Fig. 3) and communicated to the social network engine, which then proposes candidate keywords such as "foreign restaurants" 504a, "daily news in my area" 504e or "my actively played games" 504d which may then either be accepted (confirmed) by the user or rejected. This is one example of as an example of context-based data.

[0069] In Fig. 5 keywords 506a enclosed by a dotted line indicate implicit keywords added based on location based data. As an example, the geographical location of the user's mobile electronic device is continuously detected and communicated to the social network engine, which then, based on an expert system, proposes candidate keywords of potential interest to the user, such as "Japanese restaurant around my current location" 506a, if the system knows that the user has a certain interest in Japanese food, e.g. based on the selection and significance of the topic "Favorite Japanese restaurant" in the list of keywords (preferences and/or interests) of the individual user.

[0070] In Fig. 5, keywords 508a enclosed by a dashed and dotted line indicate explicit keywords added by a different user of the social network, such as friends connected to the user. As an example, if both users share the interest of enjoying movies, the second user (or as an alternative also the social network engine) may propose to the first user to add the item "new movies this week" 508a to his interest cloud. The first user is easily aware of this proposal, because this proposal may be clearly marked, for example, by means of color encoding explicit keywords added by a different user. The exclamation mark "!" in the interest cloud (or any other suitable graphical symbol) indicates that the new explicit keyword needs to be confirmed before it will be added as a real effective keyword to the individual interest cloud of the first user. Of course, if the first user should reject (not confirm) the proposed keyword, it will finally disappear (or become inactive) in his individual interest cloud. As an alternative, the proposed keyword may become active (effective) if the user should not operate the proposed keyword during a given time period.

[0071] In Fig. 5 the question mark "?" (or any other suitable graphical symbol) indicates that the new implicit keyword needs to be confirmed before it will be added as a real effective keyword to the individual interest cloud of the first user. Of course, if the first user should reject (not confirm) the proposed keyword, it will finally disappear (or become inactive) in his individual interest cloud. As an alternative, the proposed keyword may become active (effective) if the user should not operate the proposed keyword during a given time period.

[0072] As will become apparent to a person skilled in

the art, instead of changing or re-adjusting the individual preferences or interests in an input mask, such as that shown in Fig. 4 and explained above, the user may, of course, also grasp certain keywords in the interest cloud shown in Fig. 5 to 10 and move or manipulate these keywords as desired to thereby establish new user-specific preferences and/or interests. As an example, by dragging the keyword "News about my friends" from the left-hand side of the interest cloud towards the right-hand upper part of the interest cloud, i.e. near the keyword Japan, new links between keywords may be established, linking e.g. news about all those friends of the user that are interested in the topic Japan, to thereby establish a link between these friends and the topic "Japan". This is an example of a graphics-oriented modification of the interest cloud.

[0073] The above interest cloud is a small example of how the concept works. The example may use different colors and dashed lines to show the status of the different keywords. All black keywords may be edited by the user, all keywords enclosed by a dashed line or represented with a green color may be implicit and added by the system as suggestions to the user, based on his interests. A dotted line or blue color may also represent an implicit keyword, but may be added based on the current location of the user. Keywords represented in red color or enclosed by dashed and dotted lines may be a suggestion by a friend of the user.

[0074] Question marks in the above example show where new additions are made by the system that the user might want to edit. They are an optional feature to highlight changes in the interest cloud. Exclamation marks are similar, as they also wait for confirmation, but were added explicitly by a friend of the user and thus have a different quality to the interest cloud.

[0075] Of course, also different graphical representations of the interest cloud may be utilized, implying different graphical encodings for relationships and functionality. One example for such an alternative graphical representation is shown in Fig. 9, where the different sizes of graphical symbols or circles indicate the weights attributed to specific keywords displayed in the interest cloud.

[0076] As will become apparent to a person skilled in the art, many different styles of graphical representations may be utilized for displaying the individual keywords (preferences and/or interests) of an individual user.

[0077] With reference to Fig. 6 a method for modifying an interest cloud, such as that shown in Fig. 5, will be described in more detail. In Fig. 6, the rectangular boxes show comments explaining in brief what is shown in the respective left-hand part of the respective drawing.

[0078] As shown in the upper part (step S 6a), based on the user's interaction the system has added an implicit keyword "my favorite bands", which may be indicated in green letters to symbolize a suggestion added by the system to suggest a new keyword to the user and linked with the respective top-level keyword "music news" by a

dashed line ending in small dots.

[0079] As shown in step S 6b, if a user highlights this suggestion, e.g. by activating a special-purpose button or by simply navigating onto the suggested implicit keyword, several options pop up for a further selection by the user, such as "delete" (implicit keyword), "add" (implicit keyword) and "expand" (implicit keyword), as shown in step S 6c. The options "add" and "delete" cause the suggested implicit keyword to be added or deleted from the interest cloud.

[0080] If the user selects the option "expand", as shown in step S 6d, the expand symbol is highlighted, in this example by hatching of the option symbol, and further options pop up as a suggestion to and for selection by the user, namely specific band names "band 1" to "band 5", as shown in step S 6e.

[0081] In response, the user may select some of these suggestions, e.g. in this example "band 1" and "band 4", these graphical symbols are also highlighted, in this example by hatching of the option symbol, as shown in step S 6e, and the sub-keywords selected, namely "band 1" and "band 4" are added to the interest cloud of the user.

[0082] Finally, the interest cloud is modified and displayed, as shown in step S 6g, with the suggested and selected new sub-keywords "band 1" and "band 4" indicated in the same manner as those keywords already included in the list of keywords, namely in black solid letters and with black-colored interconnection lines. In this way, a modified list of keywords (modified interest cloud) is generated, which is then used in the future for selectively filtering content and displaying the filtered content in accordance with the modified interest cloud on the display of the user.

[0083] Changing keywords (implicit and explicit) is the same for the user. Depending on the keyword, several options can present themselves (such as delete, add, move, expand, etc.). The system can suggest new keywords to add, show other places how to connect existing keywords to the cloud to improve the overview, or lead the user to new activities based on the keyword. For example, as shown in table above, the newly added bands can provoke new implicit keywords that can link to the online shop so the user can buy the music of these specific bands.

[0084] Fig. 7 shows another example of creating and modifying an interest cloud. In this example, the system makes several suggestions for implicit keywords which may be highlighted, for example, by hatching or a color. In the following, we will focus on the system's suggestion that a new trailer for a new sequel of a certain game, in which the user is already interested in (named game 1 in this example), will be released in the next week. This suggestion for an implicit keyword may be generated by the system e.g. based on the user's interaction with the system, more specifically based on the fact that the user is actively playing the game "game 1". Based on keywords that are accompanying raw input data input to the system, the system knows that the publisher of "game

1" is working on the sequel to this game. Based on the user's interaction, the system knows that the user (actively playing "game 1") is highly likely to be interested in news about the game "game 1" and therefore makes the suggestion for adding the implicit keyword to the user's interest cloud by adding the sub-keyword "new trailer for sequel to game 1 (available next week)".

[0085] If the user navigates onto the suggested implicit keyword, further options may pop up, as shown in step S 7b, such as "Keep you updated? Yes" and "Keep you updated? No" as shown.

[0086] Fig. 8 summarizes the method steps for proposing and entering implicit keywords into the interest cloud of a user based on the interactions of other users, the user is connected with ("friend"), of the social network.

[0087] More specifically, the user James, to which the user is connected with (e.g. via similar interests in the individual profiles of both users matching with each other or via a "friends" function or button of the social network), suggests "new movies this week" as an implicit keyword to the user. This suggestion for an implicit keyword is cross-hatched in step S 8a. If the user navigates on this new implicit keyword, option pop up in the interest cloud as shown in step S 8b, namely "add in (interest) cloud? Yes / No". If the user selects the option "YES", as shown in step S 8b, the hatching or color of the new keyword may change (to indicate an implicit keyword suggested by the system and added to the interest cloud) and the link to friend "James" is deactivated (separated) and the link to the keyword "Entertainment News", which is already included in the interest cloud of the user, is set, as shown in step S 8c. As shown in step S 8d, once the user has accepted the new keyword, the system may now propose another implicit keyword, such as "movie theater (s) near my location", based on the location of the user. In this way an interest cloud in accordance with the specific needs of the user of the social network may be built-up and updated.

[0088] As will become apparent from the above, every user can only control his own interest cloud. Suggestions by other users, be this trusted friends or advertising companies, are marked as such and can be accepted or rejected. Both choices are stored and will influence future suggestions to the cloud. Suggestions are not targeted towards specific users. A suggestion is like any other added interest keyword with information who might be interest about it.

[0089] In the example of Fig. 8, the user's friend James added a keyword "new movies this week" to his cloud with the context that this something he wants to share with his friends. As the user is also interested in entertainment news, he adds this new keyword to his interest cloud.

[0090] Fig. 9 shows another embodiment of the interest cloud of a user, wherein the implicit and explicit keywords as well as suggestions of the system and related options are encoded in a different manner.

[0091] As will become apparent from the above, users

such as vendors or manufacturers (or game publishers, as in the example above) can add keywords to, for instance, media content (e.g. a trailer for a new product) in order to inform fans about the coming product. The added content is automatically connected to users who might be interested in the product. These users may be identified by scanning through the profiles of all users of the social network and identifying those users having keywords in their interest cloud which match with the implicit keyword proposed by the system in accordance with the product. When displayed to the user, his keyword can be accepted or rejected by the user, which in the process tells the system that he wants to get more on the topic in the future, or not.

[0092] The goal of future content is to link the content to the user ahead of time. This serves as a reminder as much as it delivers personally relevant information to the user.

Obtaining and Filtering Input Data

[0093] Referring to Fig. 10, the social network engine receives input data (DATA IN) in various different ways and from various different sources as outlined above, in particular as explained with reference to Fig. 2 above.

[0094] The received or input data may include a time-tag indicating the exact date of some kind of event in the future, presence or past. Preferably, once a datum is associated with a time-tag, the time-tag is either in a pre-defined data format or the existence of the time-tag is indicated by a flag or similar indication in the data enabling a quick and simple search for such time-tags and further processing. As an example, a user may enter data (information) about an event together with time information about the exact date and possibly also time duration of the event and according to the present invention the data about the event and the time-information (time-tag) are linked with each other.

[0095] The input data are then further processed in various manners. As an example, the input data may be stored in a database accessible by all or selected users of a social network via the social network. Or the input data may be associated with various kinds of keywords and stored in a database of the social network, thus enabling a quick and simple categorization of the data in accordance with e.g. individual user preferences and/or interests. Or the data may be sorted in chronological order, in accordance with the time history given by the time-tags associated with the data. The data may then be stored in the database in this chronological order. Or the social network engine generates a link to the event and some keyword information about the event that will be sent to the individual user later instead of transmitting all detailed information about the event. By clicking on the link or some other kind of icon the user may then retrieve all necessary information about the event only if needed to save computing time and transmission bandwidth otherwise. As will become apparent to the person

skilled in the art, many different ways of further processing can be performed for the input data.

[0096] Once a user is logged-in in a social network, a request for data is generated by the user, requesting content (data) from the social network engine, such as his personal news data, information about news in the social network, new messages and notifications in the social network for the user. The social network engine then selects (sorts out) all those data in accordance with user-specific preferences and/or interests (as entered into the individual list of keywords (interest cloud) of the user) and presents these data to the user (DATA OUT). To this regard the data filter engine shown in Fig. 2 may filter the input data (or as an alternative data stored for the user in a data storage) in accordance with the individual preferences and/or interests (interest cloud) of the user, possibly also in accordance with additional data such as user selection data, proposals for filters or social data (cf. Fig. 2), and enables access to these data to the specific user. This does not exclude, of course, that also other data may be provided to the user. However, those input data that are selected in accordance with the individual preferences and/or interests of the specific user are treated or transmitted with higher priority for the specific user. The filtered data (content) are then displayed on the display of the user's electronic device, of which one example embodied as a smart phone is shown in Fig. 11.

[0097] As shown in Fig. 11, the user's mobile electronic device comprises a display for displaying content. As shown in Fig. 11 the smart phone has a touch-sensitive display with sliders on the right-hand side and bottom rim for sliding / scrolling the display are as desired. The display displays content as indicated by the schematic lines in the central area of the display. Furthermore, the display displays several buttons "INTEREST CLOUD" "NEWS" "MARKETPLACE" "GENERAL TOPICS", which, if activated, cause a new window to be opened on the display. If the button "INTEREST CLOUD" is activated (touched), the user's interest cloud is opened and displayed as outlined above. If the button "NEWS" is activated, a new window is opened, which displays news, which are filtered in accordance with the interest cloud of the user. As an example, if the interest cloud includes the preferences and interests of the interest cloud shown in Fig. 5, in the "news" windows news relating to the preferred topics "entertainment news", general news", "music news" and "news about my friends" will be displayed with preference, taking into consideration also the sub-keywords, such as "daily news in my area" and the like.

[0098] As will become apparent, the user may switch between the "interest cloud" window and any other window repeatedly. Any modification of the of the interest cloud will have a corresponding influence on any function for displaying content, such as the displaying of news.

[0099] As an example, of how the filtering of content based on the user's specific interest cloud may have an influence on the content actually displayed on the user's display, reference is made to Fig. 12a and 12b in the

following. Fig. 12a schematically shows the display of a user after creating a first interest cloud of his specific preferences and/or interests. Based on this interest cloud certain settings for filtering content are used to finally combining the content to buildup the display of Fig. 12, which includes six fields for advertising, as schematically indicated by the crossed-out boxes "1" to "6". For instance, the user may add the keyword "Paris" to his interest cloud, indicating e.g. that he is interested in topics about the city Paris. Then, in accordance with the other keywords of the user the filtered content is generated, including the advertisements "1" to "6".

[0100] If the same user modifies his interest cloud, this may result in a different filtering of content and selection of advertisements, as indicated by the crossed-out boxes "4" "7" "3" "1" "2" and "8" in Fig. 12b. It is noted that some of the advertisements selected by the system for the particular user may be the same, but that the order in which these advertisements are displayed to the user is modified in accordance with the updated interest cloud of the user. Of course, Fig. 12b may also show the display of another user having a different interest cloud (different preferences and/or interests). Of course, the crossed-out boxes in Fig. 12a and 12b may be representative for any content (data) to be displayed on the user's display.

[0101] As will become apparent to the person skilled in the art the method according to the present invention provides added visibility of relation to activities, events, content and people - collectively moments - and it is in particular the visualization of the dynamic significance that changes the timeline into an easy-to-use productive social life tool when using social networks.

[0102] While various embodiments have been described above, it should be understood that they have been presented by way of example only, and not limitation. For example, any of the elements associated with the social network engine may employ any of the desired functionality set forth hereinabove. Thus, the breadth and scope of a preferred embodiment should not be limited by any of the above-described exemplary embodiments.

Claims

1. A computer-implemented method for selectively displaying content to a user of a social network, comprising:

maintaining in a computer system for each user of said social network a profile including data on individual preferences and/or interests of the user and the significance of each preference and/or interest for the user;
providing input data including content;
receiving a request of said user for displaying content; and
selectively displaying filtered content to said user in response to said request, wherein

said filtered content is displayed in accordance with the profile of said user.

2. The computer-implemented method as claimed in claim 1, wherein said filtered content is displayed in accordance with a list of keywords and in accordance with the individual preferences and/or interests of said user, said list of keywords being stored as part of the profile of said user on a central server of said social network. 5
3. The computer-implemented method as claimed in claim 2, further comprising the step of setting said list of keywords, comprising: 10
 - displaying a graphical representation of said list of keywords on a graphical user interface (GUI) of an electronic device operated by said user, said graphical representation indicating the significance of said keywords and the connection of said keywords with other keywords included in said list of keywords; 20
 - modifying the significance and/or connection of said keywords in response to input data of said user to thereby obtain a modified list of keywords including the keywords and the respective significance and/or connection associated therewith; and 25
 - storing said modified list of keywords as part of the profile of said user on a central server of said social network. 30
4. The computer-implemented method as claimed in claim 3, wherein said graphical representation of said list of keywords is displayed as a separate window of said graphical user interface (GUI) upon activation of a menu button of said graphical user interface (GUI). 35
5. The computer-implemented method as claimed in claim 4, wherein said graphical user interface (GUI) is configured to display said filtered content in a central display area of said graphical user interface, said menu button being permanently displayed at a periphery of said central display area of said graphical user interface. 40
6. The computer-implemented method as claimed in claim 5, wherein the filtered content displayed in the central display area of said graphical user interface is modified upon modification of said list of keywords and wherein the user can repeatedly change between a window for displaying the graphical representation of the modified list of keywords and a window for displaying the modified filtered content. 50
7. The computer-implemented method as claimed in any of claims 3 to 6, wherein said step of setting said 55

list of keywords further comprises:

displaying a plurality of explicit keywords included in said list of keywords together with the significance of said explicit keywords and how the explicit keywords are connected with each other.

8. The computer-implemented method as claimed in any of claims 3 to 7, wherein said step of setting said list of keywords further comprises a step of generating an implicit keyword, comprising: 10

displaying at least one implicit keyword as a candidate keyword in said graphical representation of said list of keywords, said candidate keyword being displayed in a different manner or style than the keywords already included in said list of keywords; 15

prompting or waiting for an interaction of said user with the candidate keyword confirming that the candidate keyword shall be entered in said modified list of keywords; and 20

displaying the candidate keyword in the standard manner as the other keywords already included in said list of keywords to thereby enter a new keyword in said modified list of keywords. 25

9. The computer-implemented method as claimed in claim 8, wherein said step of generating an implicit keyword further comprises: 30

monitoring and analyzing the user's interaction with content displayed on said graphical user interface (GUI); 35

associating at least one new keyword with said content displayed on said graphical user interface (GUI) and a significance thereof; and displaying said at least one new keyword as a candidate implicit keyword in said graphical representation of said list of keywords if said significance exceeds a predetermined threshold. 40

10. The computer-implemented method as claimed in claim 9, wherein said step of generating an implicit keyword further comprises: 45

determining a candidate connection of said at least one new keyword based on the user's interaction with content displayed on said graphical user interface (GUI) determined in said step of monitoring and analyzing the user's interaction with content displayed on said graphical user interface (GUI); and 50

displaying said at least one new keyword as a candidate implicit keyword in said graphical representation of said list of keywords together with a proposal for a connection with keywords al-

ready included in said list of keywords.

11. The computer-implemented method as claimed in any of claims 8 to 10, wherein said step of generating an implicit keyword further comprises:
5
monitoring and analyzing the user interactions of at least one member of the social network who is connected to said user with content displayed on a graphical user interface of said at least one member, said at least one member being connected with said user via the settings of the user's profile or a friend's profile; and/or
10
monitoring and analyzing the user interactions of all members of the social network or of all members of the social network having identical or similar preferences and/or interests with content displayed on the graphical user interfaces of said members; and
15
associating at least one new keyword based on said user interactions of said at least one member or of all members of the social network and determining a significance of said at least one new keyword; and
20
displaying said at least one new keyword as a candidate implicit keyword in said graphical representation of said list of keywords if said significance exceeds a predetermined threshold.
25
12. The computer-implemented method as claimed in claim 11, wherein said step of generating an implicit keyword further comprises:
30
determining a candidate connection of said at least one new keyword with keywords already included in said list of keywords based on the user interactions; and
35
displaying said at least one new keyword as a candidate implicit keyword in said graphical representation of said list of keywords together with said candidate connection.
40
13. A computer system for running a social network consisting of a plurality of members, said computer system being configured for performing the computer-implemented method as claimed in any of the preceding claims.
45
14. A computer readable storage medium tangibly embodied thereon a program of instructions executable by a processor for performing the computer-implemented method as claimed in any of the claims 1 to 12.
50

55

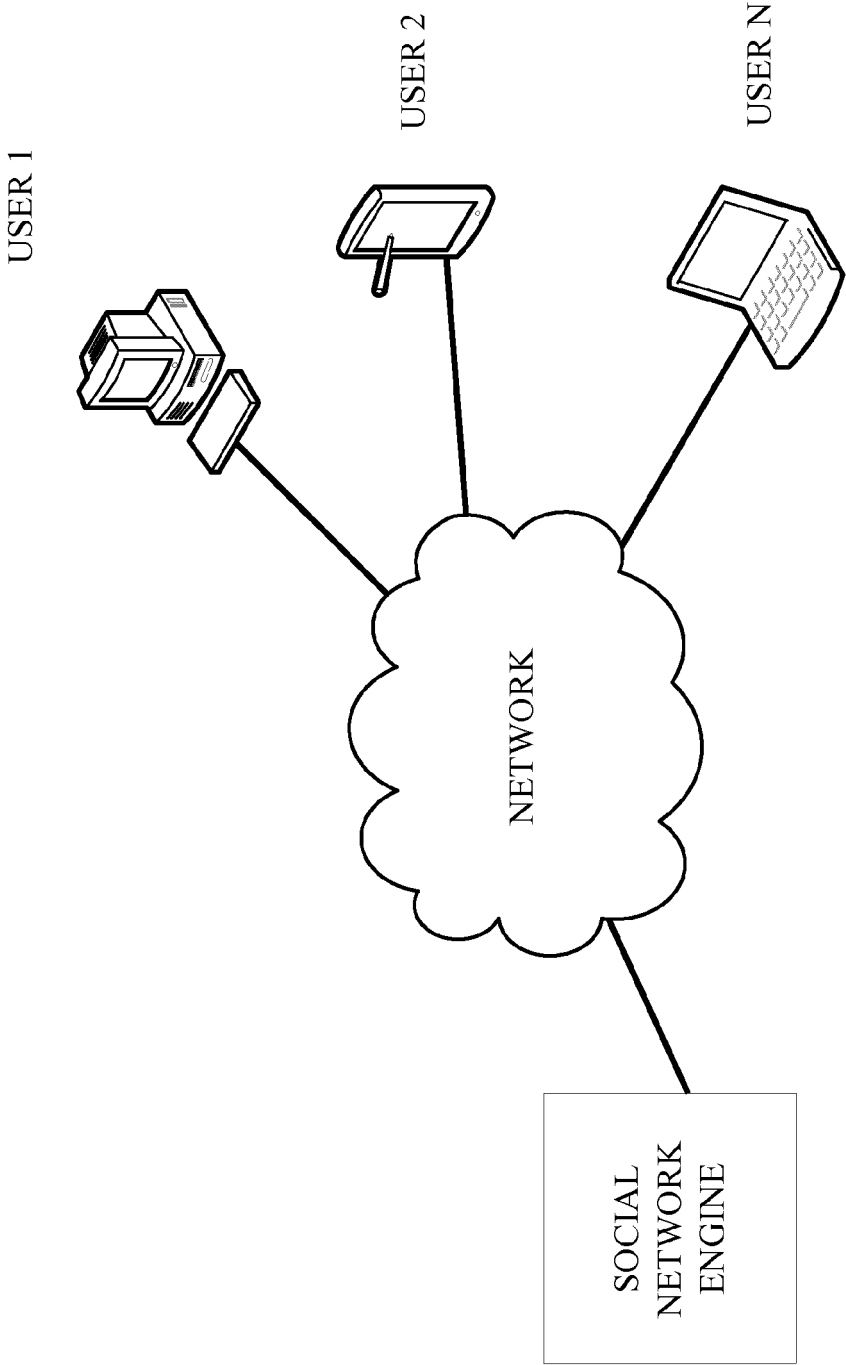


FIG. 1

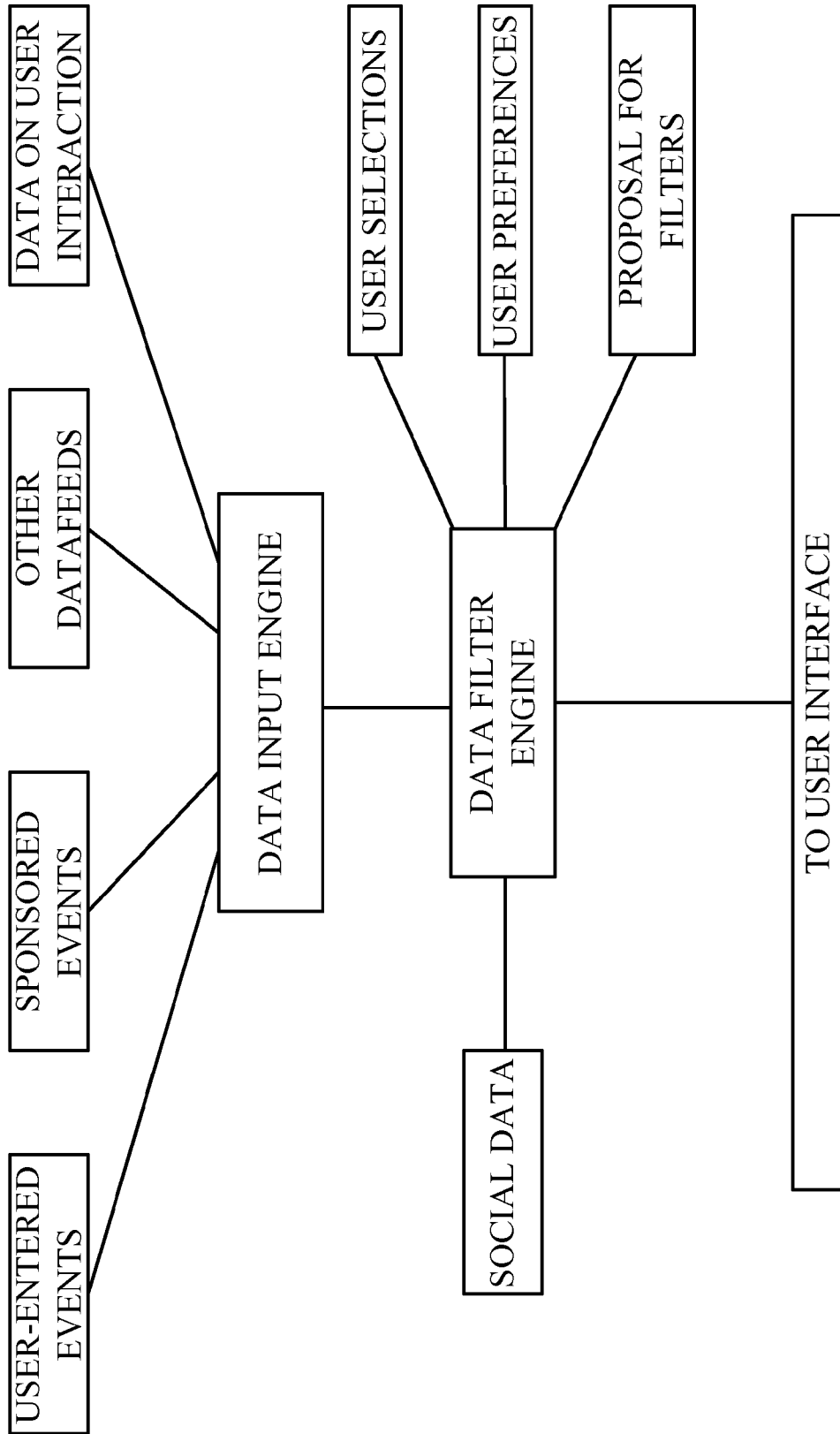


FIG. 2

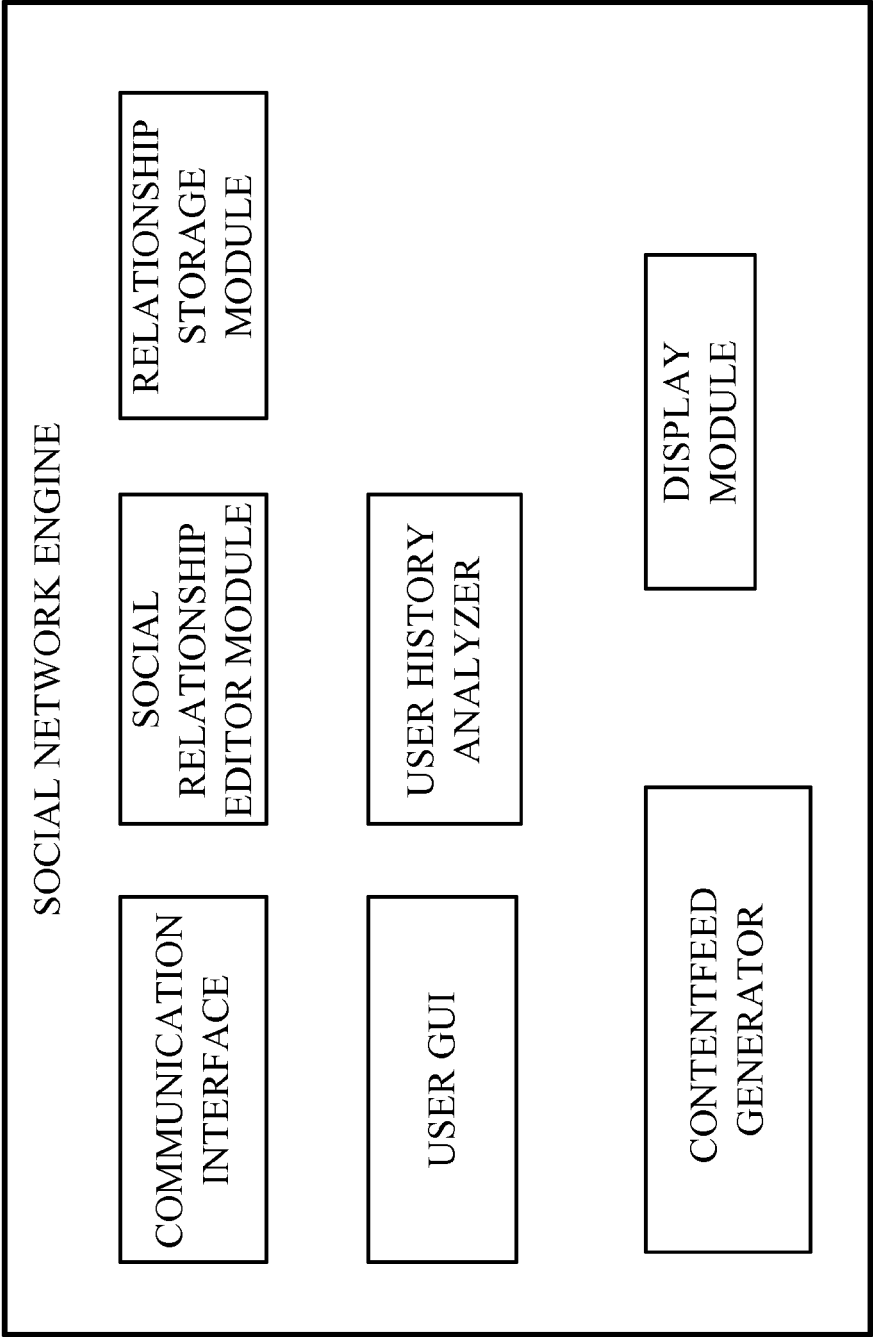


FIG. 3

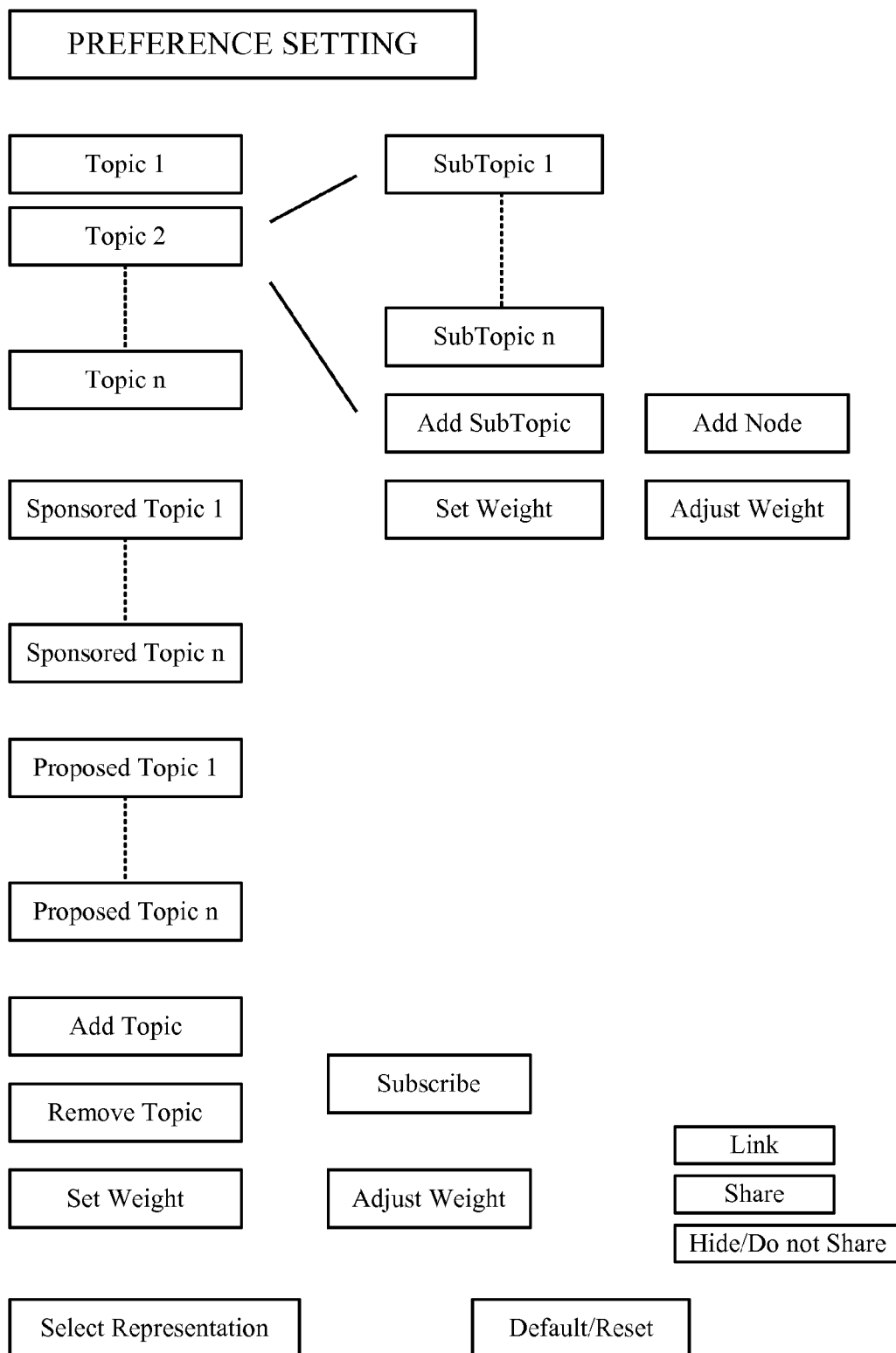


FIG. 4

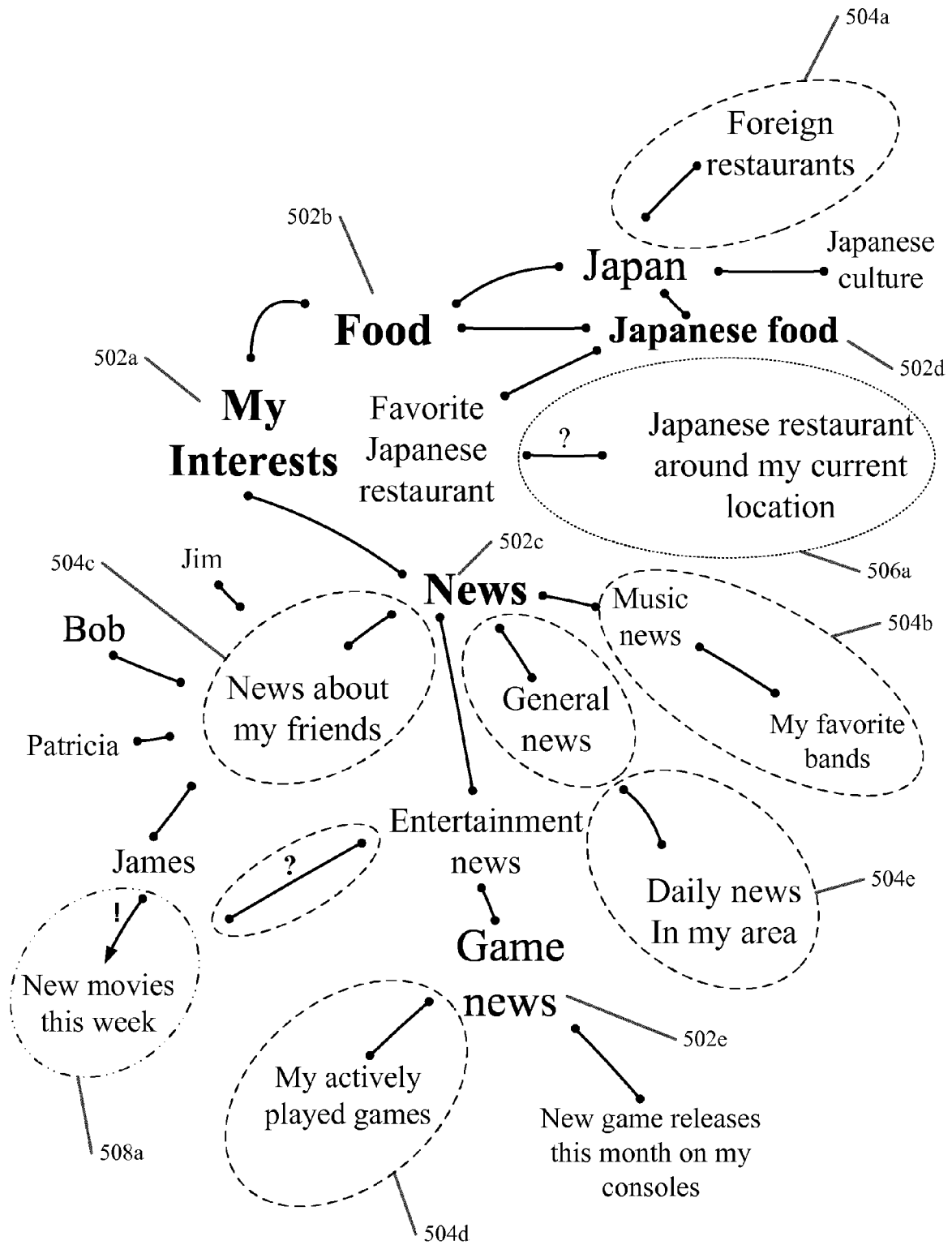
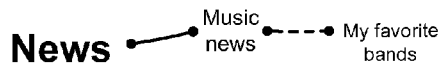


FIG. 5



The system added an implicit keyword (my favorite bands) to the interest cloud.

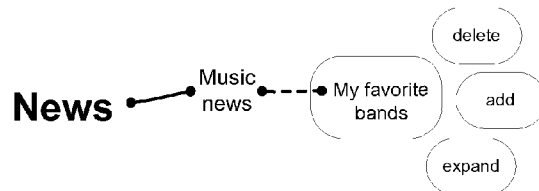
S 6a



If the user highlights it

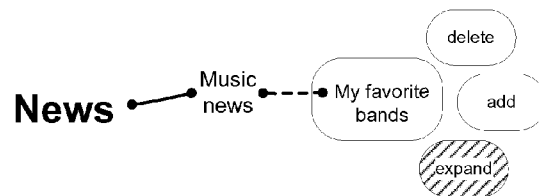
...

S 6b



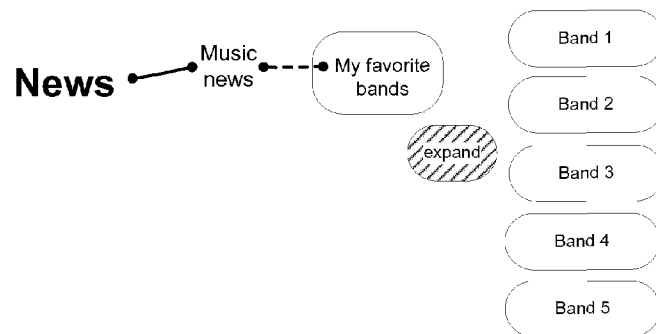
... Options pop up for the user to choose.

S 6c



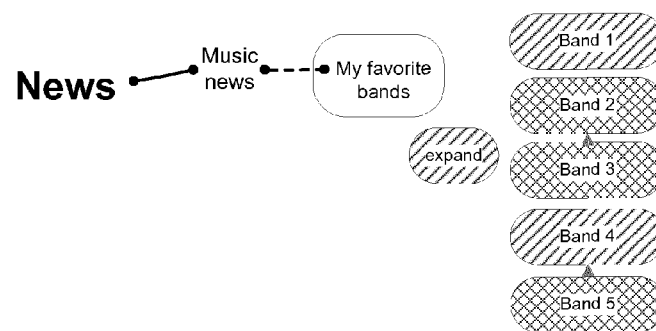
Choosing the option „expand“...

S 6d



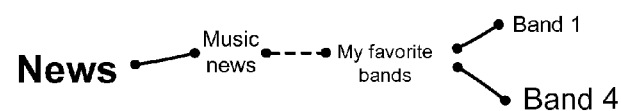
Adds the keywords to the existing keywords the system suggests as appropriate. In this example the system can display the 5 music bands the user hears most often (via the online music channels).

S 6e



The user chooses two of the bands to be displayed, deleting the other three.

S 6f



Then the user changes the weight of the Band 4, as he likes it more than Band 1.

S 6g

FIG. 6

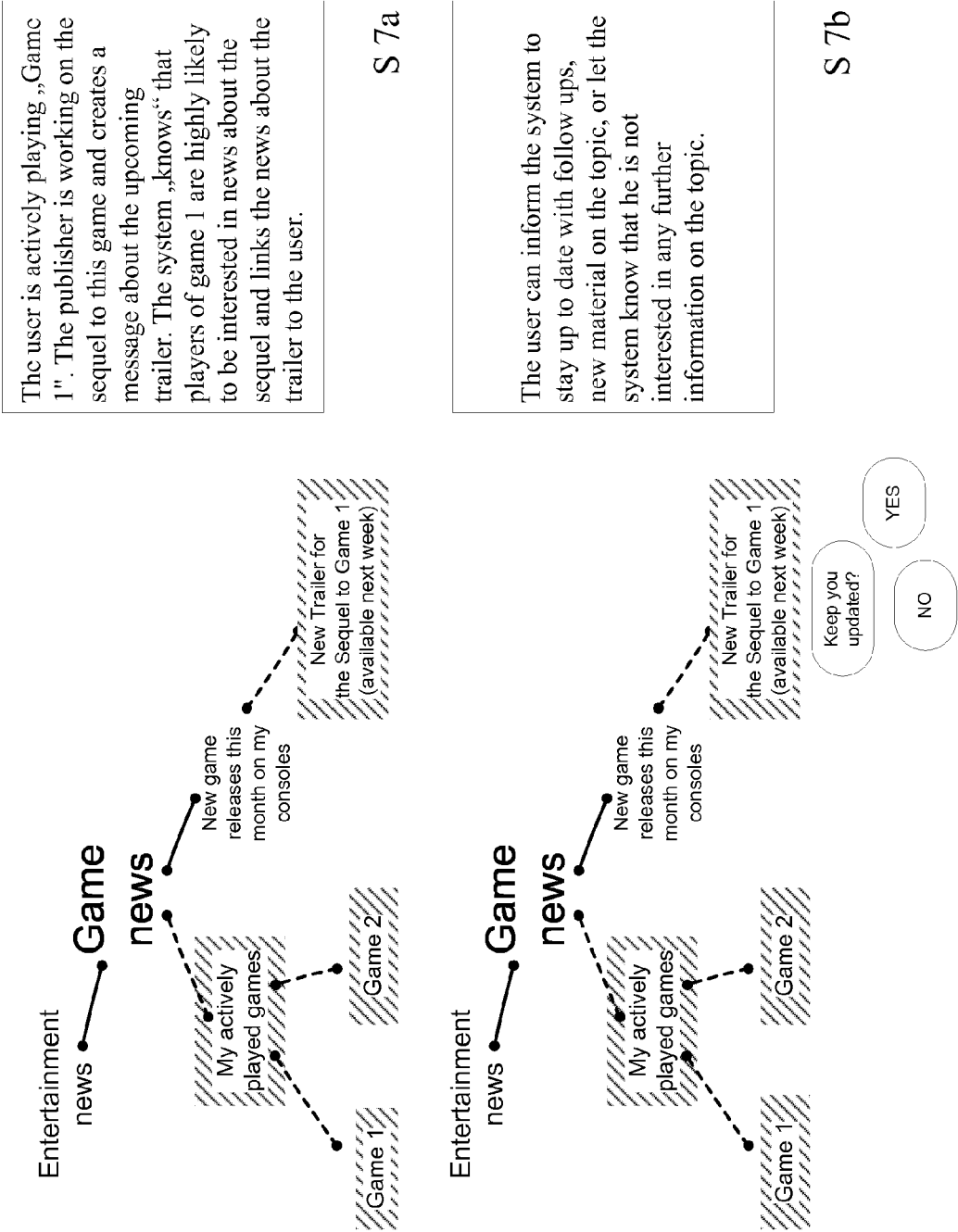
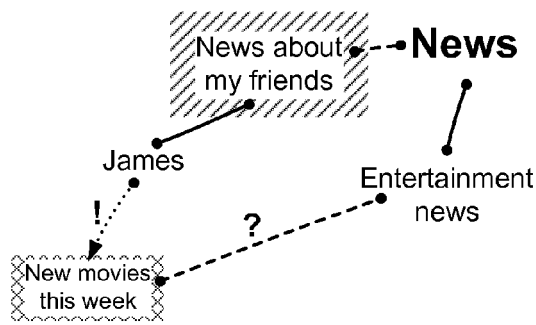
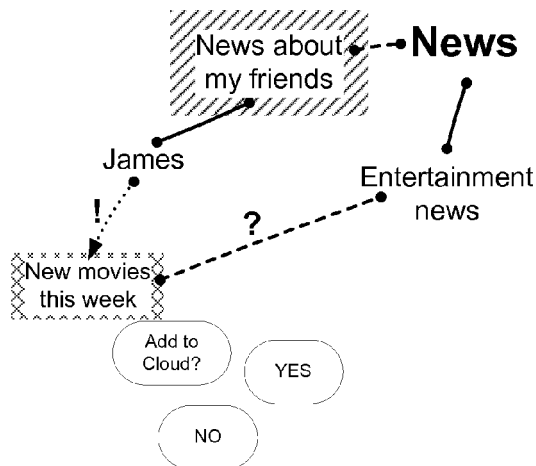


FIG. 7



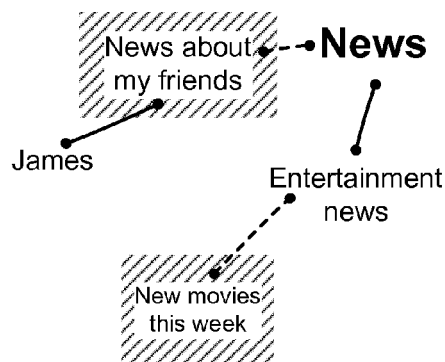
The user's friend James suggested a new keyword to the user „new movies this week“ that will link to a portal showing the latest movie schedule.

S 8a



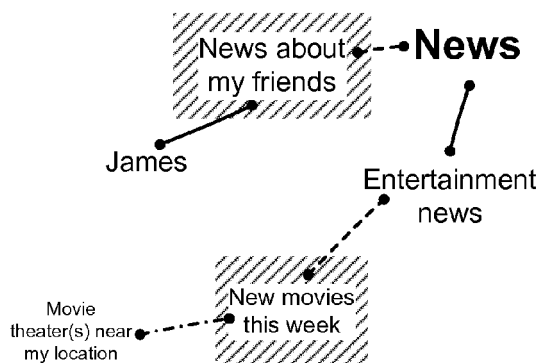
By clicking on the new topic the user can choose to add or delete the link.

S 8b



By accepting the new keyword the link to „Entertainment news“ is set and the link to James is separated.

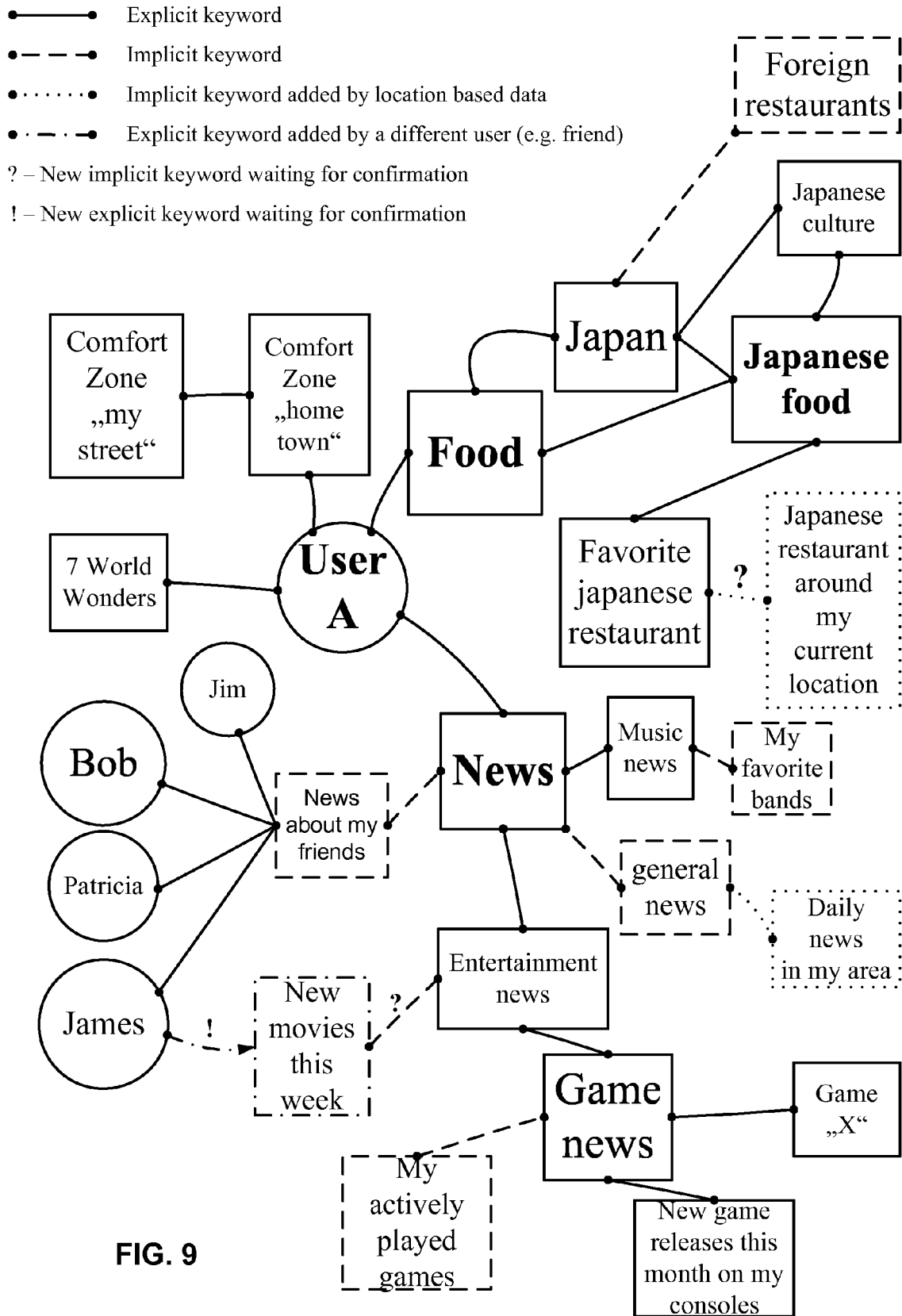
S 8c



As the user accepted the new keyword the system suggests now a another keyword to connect the user to the nearest movie theater.

S 8d

FIG. 8



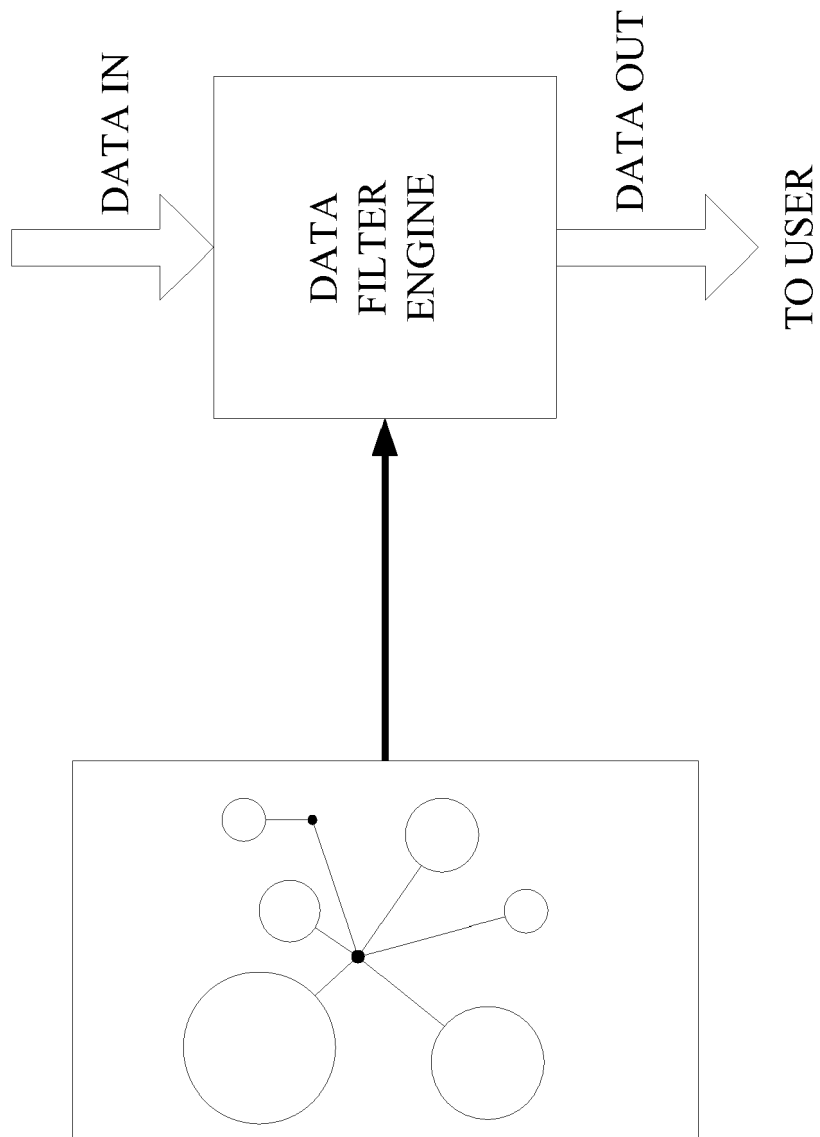


FIG. 10

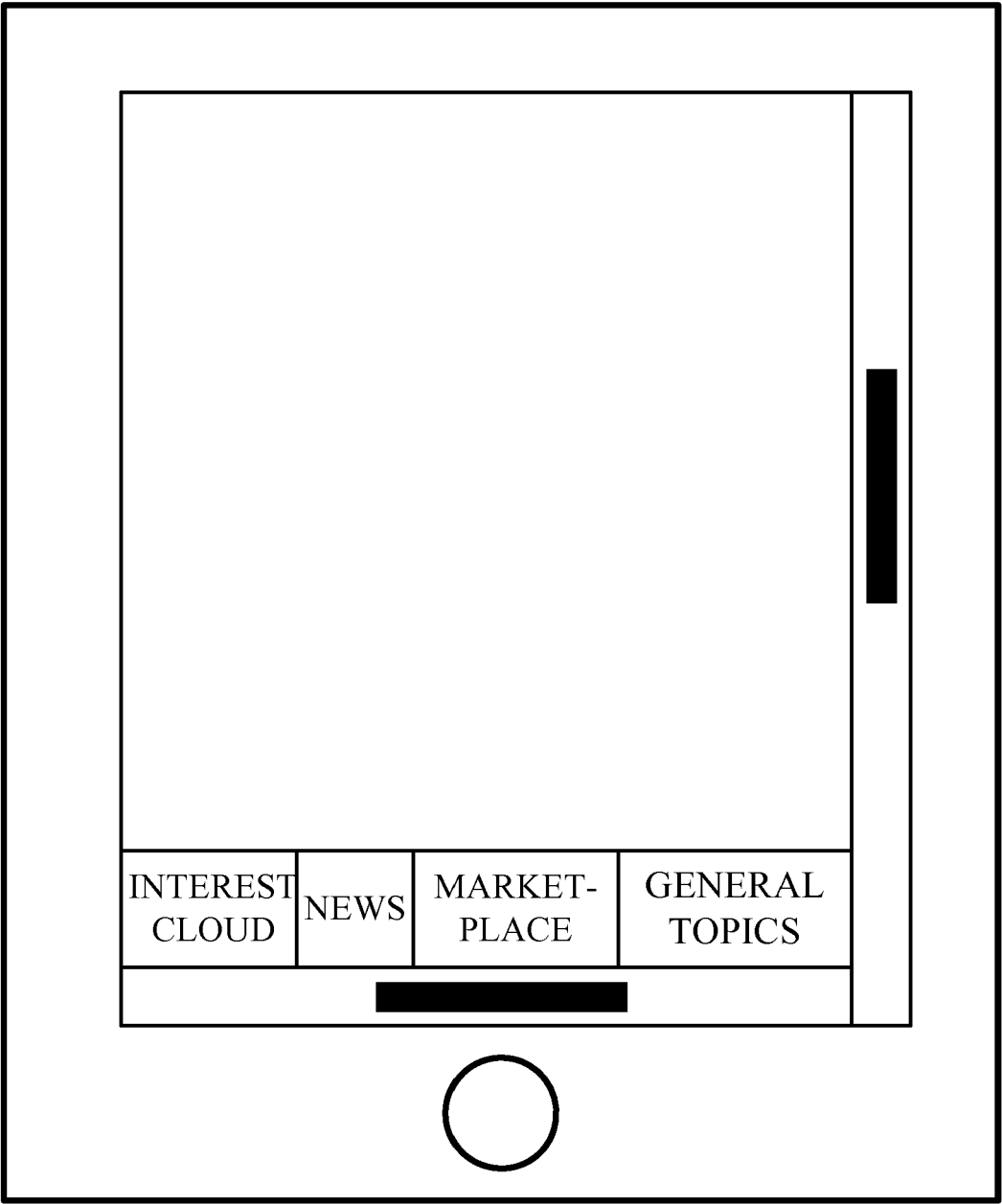


FIG. 11

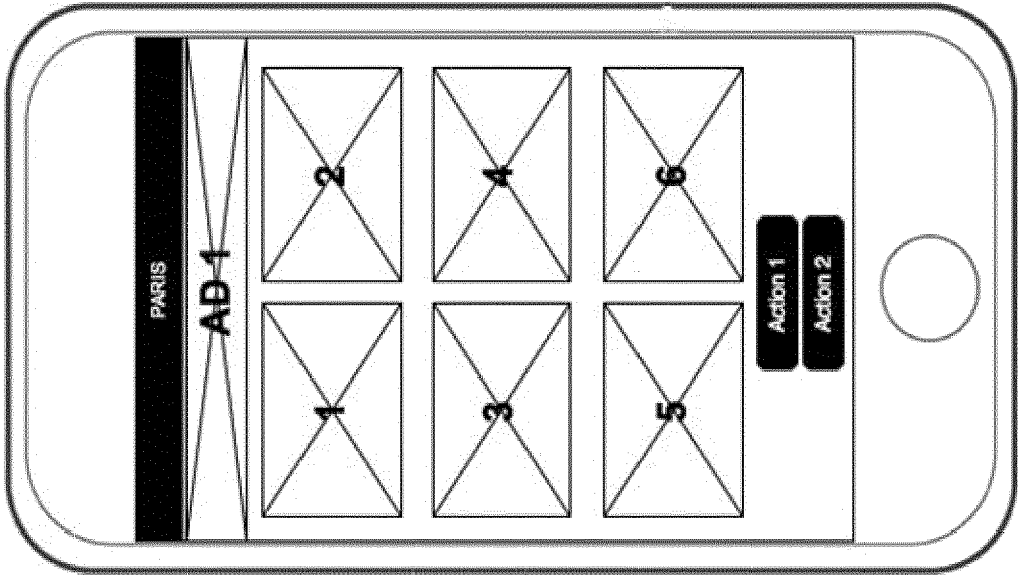


FIG. 12a

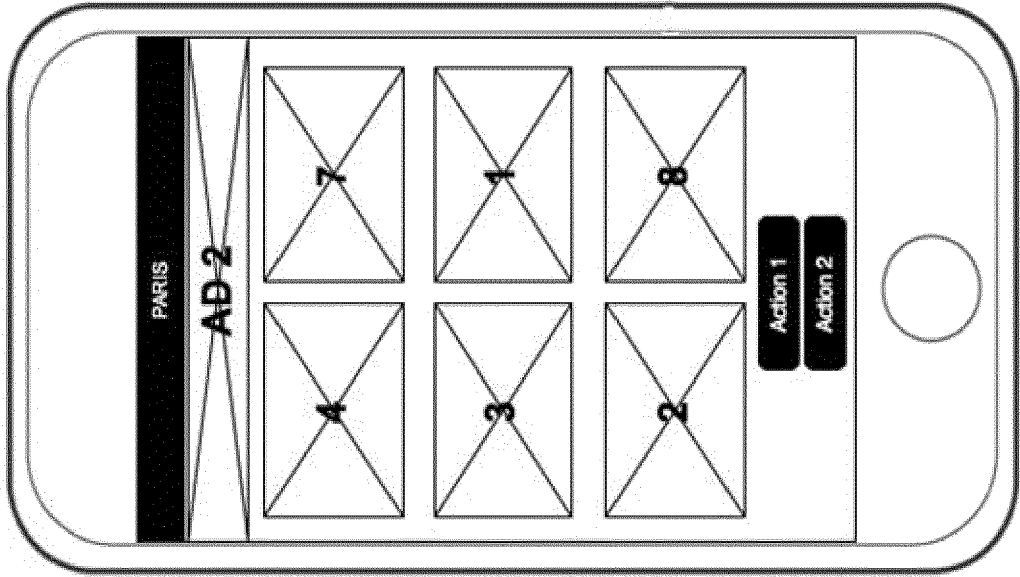


FIG. 12b

REFERENCES CITED IN THE DESCRIPTION

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